

REMARKS

This document is filed in reply to the office action dated April 7, 2004 ("Office Action"). Applicants have amended claim 1 to promote clarity. No new matter has been introduced.

Claims 1, 3-5, 7-9, and 11-37 are pending. Among them, claims 1 and 11 have been examined. Contrary to the Examiner's statement in the Office Action, claims 3 and 23-37 have never been withdrawn. Reconsideration of claims 1 and 11 and consideration of claims 3 and 23-37 are respectfully requested in view of the following remarks.

Rejection under 35 U.S.C. § 112, first paragraph

The Examiner rejected claims 1 and 11 for failing to comply with the written description requirement. See the Office Action, page 2, lines 17-18. Applicants respectfully traverse.

Claim 1 covers a composition containing an enriched American ginseng extract obtained by extraction, centrifugation, and filtration with an ultrafiltration membrane with a molecular weight cut-off of at least 1,000 to give a retentate. In the response filed on February 2, 2004, Applicants pointed out that "the American ginseng extract ... inherently contains ... compounds having molecular weights of between 1,000 and 10,000 dalton" and added to claim 1 the recitation "the retentate contains compounds having molecular weights of between 1,000 and 10,000 dalton." See page 8, lines 16-20 of the response.

Nonetheless, the Examiner asserted that the "addition of an upper weight limit [i.e., 10,000 dalton] is not supported by the disclosure or by the claims as originally filed ... [as the original disclosure or claims] does not state that the extract must be less than 10,000." See the Office Action, the paragraph bridging pages 2 and 3.

It appears that the Examiner misinterpreted the just-mentioned recitation as excluding compounds having molecular weights above 10,000 dalton from the retentate. As mentioned above, Applicants added the recitation to merely point out that the retentate contains compounds having molecular weights of between 1,000 and 10,000 dalton, but not to narrow the claim. Indeed, the recitation does not exclude compounds having molecular weights above 10,000 dalton from the retentate. Note the open-ended phrase "contains." To clarify this

misinterpretation, Applicants have amended claim 11 to recite "the retentate contains ... compounds having molecular weights of above 10,000 dalton."

For the above amendment and remarks, Applicants submit that claim 1, as amended, meets the written description requirement. So do claims 3, 11, and 23-37, all of which depend from claim 1.

Rejection under 35 U.S.C. § 112, second paragraph

The Examiner rejected claims 1 and 11 as being indefinite, asserting that "[claim 1] appears to be missing an extraction step ... that would remove compounds of greater than 10,000 [dalton]." See the Office Action, page 3, lines 8-14. In view of the amendment to claim 1 and the remarks set forth above in the previous section, Applicants submit that amended claim 1 and its dependents, i.e., claims 3, 11, and 23-37, meet the definiteness requirement.

Rejection under 35 U.S.C. § 102(b)

The Examiner rejected claims 1 and 11 as being anticipated by Yoshikawa et al. (Chem. Pharm. Bull. 1998 vol. 46, no. 4, pp 647-654, "Yoshikawa"). See, the Office Action, page 4, lines 9-11.

This reference teaches "[a] methanolic extract and several fractions from American ginseng." See page 647, column 1, line 29 through column 2, line 2. According to the Examiner, "the reference extract appears to be identical to the presently claimed extract." See, the Office Action, the paragraph bridging pages 4 and 5.

Applicants note that the methanolic extract in Yoshikawa was prepared without removing compounds having molecular weights of below 1,000 dalton. See Chart I in Yoshikawa. By contrast, such compounds are removed from the American ginseng extract recited in claim 1. See the recitation "filtration through an ultrafiltration membrane with molecular weight cut off at least 1,000 to give a retentate" in claim 1. Thus, this American ginseng extract differs from the Yoshikawa methanolic extract.

Yoshikawa also teaches several fractions that were prepared from American ginseng by silica gel column chromatography or HPLC. See page 652, column 2, line 1 through page 653, column 2, line 55. It is well known in the art that both techniques are based on the fact that compounds in a sample separate from each other by partitioning between the stationary packing material (silica) and the mobile eluent. Compounds with **different polarity** partition to different extents, and therefore move through a silica gel column chromatography or HPLC column at different rates to give different eluents or fractions. In other words, Yoshikawa teaches preparing fractions from American ginseng based on **polarity difference** of compounds in American ginseng. It does not teach or suggest doing so based on **molecular weigh difference** of the compounds, let alone removing compounds having molecular weights of below 1,000 dalton as required in claim 1. Accordingly, the fractions taught in Yoshikawa contain compounds having molecular weights of below 1,000 dalton, and therefore differ from that recited in claim 1.

For the above reasons, Applicants submit that claim 1 is novel over Yoshikawa. So are claims 3, 11, and 23-37, all of which depend from claim 1.

Rejection under 35 U.S.C. § 103(a)

The Examiner further rejected claims 1 and 11 as being obvious over Yoshikawa. As mentioned above, the fractions taught in Yoshikawa contain compounds having molecular weights of below 1,000 dalton. As Yoshikawa does not teach or suggest removing compounds having molecular weights of below 1,000 dalton as required in claim 1, claim 1 is non-obvious over this reference. So are claims 3, 11, and 23-37, all of which depend from claim 1.

Applicant : Feng-Nien Ko et al.
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CONCLUSION

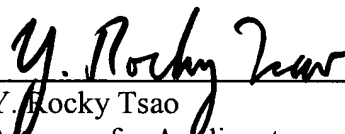
For the above remarks, Applicants submit that the grounds for rejection asserted by the Examiner have been overcome, and the claims, as pending, define subject matter that meets the written description and definiteness requirements and is novel and non-obvious. On this basis, it is submitted that allowance of this application is proper, and early favorable action is solicited.

Please apply any other charges to deposit account 06-1050, referencing attorney docket 11544-003001.

Respectfully submitted,

Date: _____

7-6-04



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